5

10

15

CLAIMS

- 1. Process for assembly of metallic parts by melting a filler material, characterized in that it consists of:
 - heating the assembly by induction heating;
- using a powder as a filler material which has a melting temperature higher than or equal to the melting temperature of the material from which the parts to be assembled is made for parts with the same nature, and with a melting temperature higher than or equal to the melting temperature of the part with the lowest melting temperature, in order to make the assembly without a new phase being formed by diffusion with a melting temperature lower than the melting temperature of the parts.
- Assembly process according to claim 1, characterized in that the material from which the parts
 are made and the material from which the powder is made are the same.
- Assembly process according to claim 1, characterized in that the powder is compacted before it is inserted between the two metallic parts.